



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/613,903

07/11/2000

Heather J. Jordan

IVGN 187.1 CON

1446

65482 7590 06/29/2010
LIFE TECHNOLOGIES CORPORATION
C/O INTELLEVATE
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER

SISSON, BRADLEY L

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

06/29/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/613,903	Applicant(s) JORDAN, HEATHER J.	
	Examiner Bradley L. Sisson	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 141, 150, 155-159 and 162-173 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 141, 150, 155-159 and 162-173 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 24 May 2010 has been entered.

Drawings

2. The drawings were received on 23 August 2002. These drawings are acceptable.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 173 recites the limitation "the highlight fragment" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1634

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 141, 150, 155-157, 159, 162-173 are rejected under 35 U.S.C. 103(a) as obvious over either US Patent 5,316,908 (Carlson et al.) or Stratagene (1993) or Stratagene Catalog (1993).

7. Attention is directed to MPEP 2129 [R-6], Admissions as Prior Art, which states in part:

I. ADMISSIONS BY APPLICANT CONSTITUTE PRIOR ART

A statement by an applicant >in the specification or made< during prosecution identifying the work of another as “prior art” is an admission ****>**which can be relied upon for both anticipation and obviousness determinations, regardless of whether the admitted prior art would otherwise qualify as prior art under the statutory categories of 35 U.S.C. 102. *Riverwood Int’l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1354, 66 USPQ2d 1331, 1337 (Fed. Cir. 2003); *Constant v. Advanced Micro-Devices Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1063 (Fed. Cir. 1988).

8. Claims 141, 165, and 169 are the only independent claims pending. Claim 141 is representative, and for convenience, is reproduced below.

141. (Currently amended): A nucleic acid ladder consisting essentially of a plurality of double stranded nucleic acid fragments, each fragment having a size in base pairs of between 20 kb and 100 base pairs, a copy number, a mass, and a relative mass wherein the mass of each fragment is the size in base pairs of the fragment multiplied by the copy number of the fragment, wherein the relative mass of each fragment is the mass of the fragment divided by the sum of the masses of all of the fragments, wherein the relative mass of any one fragment of the plurality is no more than 3 time the relative mass of any other fragment of the plurality, wherein ~~the plurality comprises at least two of the plurality of nucleic acid fragments having~~ have a size greater than 1 kb, and wherein ~~the plurality comprises at least two of the plurality of nucleic acid fragments having~~ have a size less than 1 kb.

9. As a result of amendment, claim 141 has been amended so to recite the clause "consisting essentially of" a plurality of double stranded nucleic acid fragments." As set forth at MPEP 2111.03:

Art Unit: 1634

The transitional phrase “consisting essentially of” limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original)

For purposes of examination, the claims have been construed as encompassing not only the explicitly recited nucleic acid fragments/bands, as well as any number and combinations of additional ingredients, including alternative bands, so long as they do not affect the claimed nucleic acid fragments that go to form the claimed ladder.

10. Attention is directed to the decision in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007):

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

11. It is further noted that prior art is not limited to the four corners of the documentary prior art being applied. Prior art includes both the specialized understanding of one of ordinary skill in the art, and the common understanding of the layman. It includes “background knowledge possessed by a person having ordinary skill in the art. . . [A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR* at 1396.

12. Suggestion, teaching or motivation does not have to be explicit and “may be found in any number of sources, including common knowledge, the prior art as a whole or the nature of the

Art Unit: 1634

problem itself” *Pfizer, Inc. v. Apotex, Inc.* 480 F.3d 1348, 82 USPQ2d 1321 (Fed. Cir. 2007) citing *Dystar Textilfarben GMBH v. C. H. Patrick Co.*, 464 F.3d 1356 (Fed. Cir. 2006).

13. Carlson et al., Fig. 1, disclose a nucleic acid ladder that comprises multiple nucleic acid fragments that have the same intensity. As seen in the figure, below, there are 5 bands that are less than 1 kb and there are at least four bands that have greater than 1 kb in mass. Such a showing meets a limitation “wherein at least two of the plurality of nucleic acid fragments have a size greater than 1 kb, and wherein at least two of the plurality of nucleic acid fragments have a size less than 1 kb.”

14. It is noted with particularity that a compound and its properties are inseparable. While one may identify new properties or new means for evaluating same, such does not make an old compound, or old composition, new and patentable. The claims recite no chemical or physical component that would make the nucleic acid of the claims any different from the nucleic acid ladders of the prior art. Indeed, page 8, fifth paragraph, of the specification states in part: “However, any nucleic acid molecule or combination of molecules may be used to produce the ladders or compositions of the invention.”

15. While Fig. 1 is a drawing and not a photograph, the specification does state that the Figure does represent the migration of the nucleic acid ladder in an electrophoretic environment. Said Figure clearly shows that the bands have the same relative intensity.

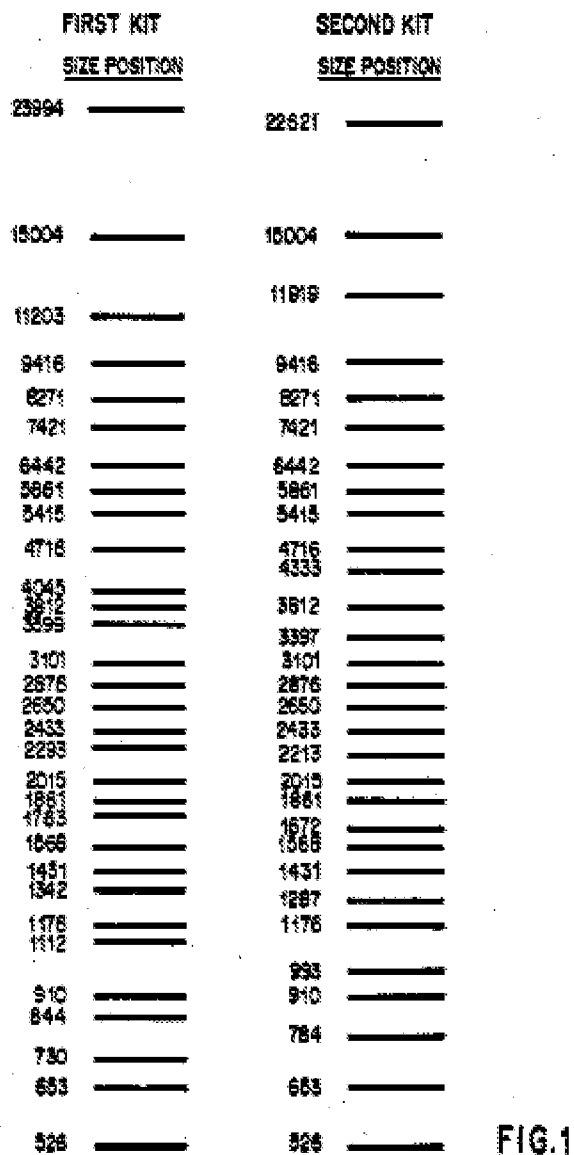


FIG.1

16. To the extent that claim 159 does positively recite that the ladder is stained with ethidium bromide, it is noted that Carlson et al. disclose such, at column 4. For purposes of examination, ethidium bromide is construed to meet the requirements of a dye as it is typically used to stain the entire gel, and with it, stain (dye) preferentially the nucleic acids therein. Accordingly, a limitation of claims 157, 159, and 160 are deemed to be met by the disclosure of Carlson et al.

Art Unit: 1634

17. Carlson et al., disclose nucleic acid ladders that comprise numerous bands that span a wide range of fragment sizes. While some of the rungs of the nucleic acid ladder fall within the recited ranges of claims, the disclosed nucleic acid ladders also comprise additional nucleic acid fragments that are outside of the recited range. Such additional bands do not detract from the instant rejection as the claims, through the use of the term “consisting essentially of,” (claim 141, line 1) or “comprising” (claim 165, line 1; and claims 169, line 1) allows for the inclusion of additional reagents (rungs of a ladder), even in significant amounts.

18. The claims do not recite any material difference in the composition of nucleic acid individual fragments. While claim 141 does require that the “relative mass” of the different fragments “is no more than 3 time [*sic*, times] the relative mass of any other fragment of the plurality,” such is deemed to be effectively represented by FIG. 1 which shows that the bands all have the same relative intensity.

19. While newly presented claims have language directing to how the relative mass is to be calculated, it is noted that the instant claims are drawn to a composition, not to a method. Accordingly, the same composition, defined by other terms, can and does anticipate the claimed invention. In support of this position, attention is directed to page 6 of the disclosure which states in part:

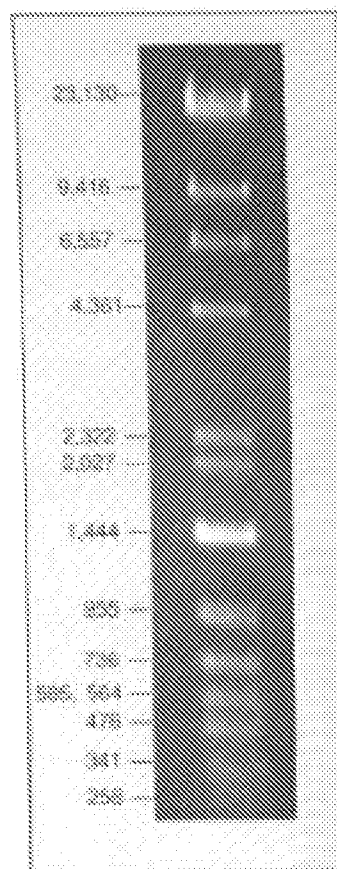
Preferably, the relative mass of each different sized fragment is substantially equivalent such that discrete bands of substantially equal intensity are produced when the fragments are resolved on a gel and stained.

20. Stratagene, at page T22, disclose a Lambda/Hind III nucleic acid ladder. As seen in the image, the ladder comprises multiple fragments that appear to have “substantially equal

Art Unit: 1634

intensity.” The ladder clearly comprises at least two fragments larger than 1 kb and two fragments less than 1 kb which have “substantially equal intensity.” Given that a compound and its properties are inseparable, and given applicants statement that nucleic acid fragments that have “substantially equivalent intensities” also have substantially equivalent relative mass (*supra*), the fragments of Stratagene are deemed to anticipate the claimed nucleic acid ladder.

21. To the degree that claims 150, 155, 156, 165-172 define alternative ranges of the fragment sizes, the nucleic acid fragments of Stratagene clearly fall within each of the stated ranges. Accordingly, the DNA ladder of Stratagene is deemed to meet a limitation of each of said claims.



Art Unit: 1634

22. The selection of which band or combination of bands, and their relationship to one another, is not deemed to constitute a patentable distinction over the prior art. Rather, such limitations are deemed to be the result of design choice and/or routine optimization.

23. It is well settled that routine optimization is not patentable, even if it results in significant improvements over the prior art. In support of this position, attention is directed to the decision in *In re Aller, Lacey, and Hall*, 105 USPQ 233 (CCPA 1955):

Normally, it is to be expected that a change in temperature, or in concentration, or in both, would be an unpatentable modification. Under some circumstances, however, changes such as these may impart patentability to a process if the particular ranges claimed produce a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. In *re Dreyfus*, 22 C.C.P.A. (Patents) 830, 73 F.2d 931, 24 USPQ 52; In *re Waite et al.*, 35 C.C.P.A. (Patents) 1117, 168 F.2d 104, 77 USPQ 586. Such ranges are termed "critical" ranges, and the applicant has the burden of proving such criticality. In *re Swenson et al.*, 30 C.C.P.A. (Patents) 809, 132 F.2d 1020, 56 USPQ 372; In *re Scherl*, 33 C.C.P.A. (Patents) 1193, 156 F.2d 72, 70 USPQ 204. However, even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art. In *re Sola*, 22 C.C.P.A. (Patents) 1313, 77 F.2d 627, 25 USPQ 433; In *re Normann et al.*, 32 C.C.P.A. (Patents) 1248, 150 F.2d 708, 66 USPQ 308; In *re Irmscher*, 32 C.C.P.A. (Patents) 1259, 150 F.2d 705, 66 USPQ 314. More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In *re Swain et al.*, 33 C.C.P.A. (Patents) 1250, 156 F.2d 239, 70 USPQ 412; *Minnesota Mining and Mfg. Co. v. Coe*, 69 App. D.C. 217, 99 F.2d 986, 38 USPQ 213; *Allen et al. v. Coe*, 77 App. D. C. 324, 135 F.2d 11, 57 USPQ 136. (Emphasis added)

24. The plurality of bands that make up each rung in the ladder of Carlson et al., and of Stratagene are deemed to have "substantially relative equal mass" as the band is shown to have "substantially equal intensities" after being separated as bands on a gel and stained.

Accordingly, claims 141, 150, 155-157, 159, 162-173 are rejected under 35 U.S.C. 103(a) as obvious over either US Patent 5,316,908 (Carlson et al.) or Stratagene (1993) or Stratagene Catalog (1993).

Art Unit: 1634

25. Claim 158 is rejected under 35 U.S.C. 103(a) as being unpatentable over either US Patent 5,316,908 (Carlson et al.) or Stratagene (1993) or Stratagene Catalog (1993) when taken in view of US Patent 5,635,365 (Ansari et al.).

26. See above for the basis of the rejection as it relates to the disclosure of both Carlson et al., and Stratagene.

27. Neither Carlson et al., nor Stratagene have been found to disclose staining the ladders with SYBR green ([2-[N-(3-dimethylaminopropyl)-N-propylamino]-4-[2,3-dihydro-3-methyl-(benzo-1,3-thiazol-2-yl)-methylidene]-1-phenyl-quinolinium]⁺).

28. Ansari et al., column 15, third paragraph, teaches explicitly of staining a gel with SYBR green so to enable visualization of the nucleic acid fragments separated therein.

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the nucleic acid ladders of either Carlson et al., or Stratagene with SYBR green as disclosed by Ansari et al., as such would have allowed the ordinary artisan with an easy, sensitive and reproducible means for detecting nucleic acids. In view of the detailed teachings in the prior art, said ordinary artisan would have had a most reasonable expectation of success.

30. For the above reasons, and in the absence of convincing evidence to the contrary, claim 158 is rejected under 35 USC 103(a) as being unpatentable over either US Patent 5,316,908 (Carlson et al.) or Stratagene (1993) or Stratagene Catalog (1993) when taken in view of US Patent 5,635,365 (Ansari et al.).

Response to argument

At page 12 of the response of 24 May 2010, applicant asserts:

Art Unit: 1634

Carlson's Fig. 1 is a drawing and the information represented in the drawing is prophetic. The drawing is meant to convey information relating to electrophoretic migration of the individual bands through a gel. There is nothing in Fig. 1 or in any of Carlson's disclosure that relates to or conveys any information about the mass of DNA in individual bands, as defined in the instant claims.

The aspect of the disclosure of Carlson et al., is prophetic and is therefore irrelevant is not persuasive. First, there is no evidence of record that substantiates applicant's position that the showing is prophetic, and not a graphical representation of that which actually did exist. Secondly, there is no requirement that an applicant, even in the instant application, have actual reduction to practice of the claimed invention. In the case of Stratagene, there can be no question that the bands have the same relative intensity (within a factor of 3 as recited in each of the independent claims) and that the showing is not prophetic. Further, as can be readily seen in the captured image, Stratagene teaches explicitly of having a relative mass "that is at least 5 times greater than the other fragments" (claim 173). Attention is directed to MPEP 2145.

Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art.

The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

Thirdly, the representation of Carlson et al., show bands that have the same relative intensity. Such a showing speaks to the relative mass of the bands as being the same, else, one band would appear as more or less intense than the remaining bands. Accordingly, the aspect of the bands

Art Unit: 1634

having the same intensity and therefore, the same relative mass, is deemed to be a property

inherent to the prior art nucleic acid ladder. Attention is directed to MPEP 2112 [R-3]:

The express, implicit, and inherent disclosures of a prior art reference may be relied upon in the rejection of claims under 35 U.S.C. 102 or 103. “The inherent teaching of a prior art reference, a question of fact, arises both in the context of anticipation and obviousness.” *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995) (affirmed a 35 U.S.C. 103 rejection based in part on inherent disclosure in one of the references).

“[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art’s functioning, does not render the old composition patentably new to the discoverer.” *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). In *In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004), the court held that the claimed promoter sequence obtained by sequencing a prior art plasmid that was not previously sequenced was anticipated by the prior art plasmid which necessarily possessed the same DNA sequence as the claimed oligonucleotides. The court stated that “just as the discovery of properties of a known material does not make it novel, the identification and characterization of a prior art material also does not make it novel.” *Id.*

MPEP 2112 II:

There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003) (rejecting the contention that inherent anticipation requires recognition by a person of ordinary skill in the art before the critical date and allowing expert testimony with respect to post-critical date clinical trials to show inherency); see also *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320, 69 USPQ2d 1584, 1590 (Fed. Cir. 2004) (“[T]he fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention.”)

MPEP 2112 III:

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. “There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102.” *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

Art Unit: 1634

31. At page 13 of the response applicant asserts that Carlson et al., do not reach adjusting the relative number of the various DNA fragments so as to have the same relative mass. This argument has been considered and has not been found persuasive. While Carlson et al., may teach alternative embodiments, there can be no doubt that the bands represented in FIG. 1 do have the same relative intensity, ergo, the same relative mass.

32. Argument is also presented that the DNA fragments were derived from a particular source. This argument has not been found persuasive, as the claims at hand recite no restriction as to the source of the DNA and/or RNA. It is noted with particularity that narrowing limitations found in the specification cannot be inferred in the claims where the elements not set forth in the claims are linchpin of patentability. *In re Philips Industries v. State Stove & Mfg. Co, Inc.*, 186 USPQ 458 (CA6 1975). While the claims are to be interpreted in light of the specification, it does not follow that limitations from the specification may be read into the claims. On the contrary, claims must be interpreted as broadly as their terms reasonably allow. See *Ex parte Oetiker*, 23 USPQ2d 1641 (BPAI, 1992).

33. For the above reasons and in the absence of convincing evidence to the contrary, the rejection is maintained.

Conclusion

34. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action

Art Unit: 1634

after the filing of a request for continued examination and the submission under 37 CFR 1.114.

See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley L. Sisson whose telephone number is (571) 272-0751. The examiner can normally be reached on 6:30 a.m. to 5 p.m., Monday through Thursday.

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave T. Nguyen can be reached on (571) 272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1634

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley L. Sisson/
Primary Examiner, Art Unit 1634